

Ionic Equations Practice

Write the ionic and net ionic equations for these reactions. Assume all reactants to be aqueous. (some reactions do not work)

Common polyatomic ions:

Ammonium	NH_4^+	Nitrate	NO_3^-
Hydroxide	OH^-	Chlorate	ClO_3^-
Acetate	$\text{C}_2\text{H}_3\text{O}_2^-$	Sulfate	SO_4^{2-}
Carbonate	CO_3^{2-}	Oxalate	$\text{C}_2\text{O}_4^{2-}$
Chromate	CrO_4^{2-}	Phosphate	PO_4^{3-}
Bicarbonate	HCO_3^-		

General solubility rules for compounds in water:

- 1) All family 1A and ammonium compounds are soluble
- 2) All nitrate and acetate compounds are soluble
- 3) All Cl^- , Br^- , and I^- compounds are soluble **except** Ag, Pg, and Hg
- 4) All sulfate compounds are soluble **except** Ca, Sr, Pb, Ba, Hg^{1+}
- 5) All sulfides, carbonates, phosphates, sulfites, hydroxides and chromates are insoluble **except** for family 1A and ammonium compounds





Explain why the following reaction does not work:

